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ABSTRACT

A currency authenticator having a plurality of sensitivity settings comprising a first characteristic detector. The first characteristic detector retrieves first characteristic information from a bill to be authenticated and generates an output signal. The currency authenticator further comprises a unit for selecting one of a

5   plurality of sensitivity settings, a unit for storing reference information associated with each of the sensitivity settings, and a unit for comparing the output signal to the reference information associated with the one of the plurality of sensitivity settings selected by the unit for selecting. The unit for comparing indicates that the bill is counterfeit if the output signal does not satisfactorily compare with the reference

10   information. The unit for storing reference information stores reference information for a plurality of denominations of bills. The unit for storing stores reference information associated with each of the sensitivity settings for each of the plurality of denominations.